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10/728,993	12/08/2003	Johan Andre De Vriendt	Q78111	2803

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EXAMINER	
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ART UNIT	PAPER NUMBER
2157	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/728,993	DE VRIENDT ET AL.	
	Examiner	Art Unit	
	HUSSEIN A. EL CHANTI	2157	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *24 March 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-14* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-14* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This action is responsive to amendment received on March 24, 2008. Claims 1-14 were elected without traverse. Restriction is made **FINAL**.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-14 are rejected under 35 U.S.C. 102(e) as being anticipated by Leung, U.S. Patent No. 6,487,605.

As to claim 1, Leung teaches internet Protocol mobility supporting method for supporting the roaming of a Mobile Node (MN) in a Mobile Internet Protocol Network from a home network (HN) towards a Visited Network (VN), said home network (HN) comprising a home agent (HA), CHARACTERIZED IN THAT said Mobile Internet Protocol Network excluding said visited network (VN) comprises a Foreign Agent (FA) and that said method comprises the following steps:

a. forwarding a destination address towards said Home Agent (HA) by said Mobile Node (MN) at roaming of said Mobile Node (MN) from said home network (HN)

to said visited network (VN1) (see col. 6 lines 27-36, mobile node sends a registration request to the home agent);

b, assigning said Foreign Agent (FA) to said Mobile Node (MN) by a Foreign Agent assigning entity (FAAE) at request of said Mobile node (MN) (see col. 6 lines 48-59, the mobile node is assigned to the foreign agent);

c. Establishing a path between said Home Agent (HA) and said Foreign Agent by said Home Agent (HA) (see col. 3 lines 44-48, the FA and HA establish a tunnel for communication); and

d. Establishing a path between said Foreign Agent (FA) and said Mobile Node (MN) by said Foreign Agent (FA) based on said destination address (see col. 6 lines 48-59).

As to claim 2, Leung teaches internet Protocol mobility supporting system for supporting the roaming of a Mobile Node (MN) in a mobile Internet protocol Network from a home network (HN) towards a Visited Network (VN), said home network (HN) comprising a Home Agent (HA), CHARACTERIZED IN THAT said Mobile Internet Protocol Network excluding said Visited Network (VN) comprises a Foreign Agent (FA) and that said system, comprises the following parts:

a) destination address forwarding part (DAFP), located in said Mobile Node (MN) and adapted to forward, at roaming of said Mobile Node (MN) from said home network

(HN) to said visited network (VN), a destination address towards said home agent (HA)(see col. 6 lines 27-36);

b) Foreign Agent Assigning Entity (FAAE), adapted to assign said Foreign Agent (FA) to said Mobile Node (MN) at request of said Mobile Node (MN) (see col. 6 lines 27-59);

c) Home Agent path establishing part (HAPEP), located in said Home Agent (HA) and adapted to establish a path between said home agent (HA) and said Foreign Agent (FA) (see col. 6 lines 27-59); and

d) Foreign Agent path establishing part (FAPEP), located in said Foreign Agent (FA) and adapted to establish a path between said Foreign Agent and said Mobile Node (MN) by said Foreign Agent (FA) based on said destination address (see col. 3 lines 44-56).

As to claim 3, Leung teaches internet Protocol mobility supporting system according to claim 2, CHARACTERIZED IN THAT said destination address is an Internet Protocol address of said Mobile Node (MN), said address being a temporary address, assigned by a Dynamic Host Control Protocol server of said visited network (VN) and said destination address identifying said path between said Foreign agent and said Mobile Node (see col. 6 lines 57-63).

As to claim 4, Leung teaches internet Protocol mobility supporting system according to claim 2, CHARACTERIZED IN THAT said destination address is the

Internet Protocol address of an Access Router (AR) at the edge of said visited network, said access router (AR) being adapted to establish a path between said access router (AR) and said Mobile Node (MN) based on forwarding information provided to said Access Router by said Mobile Node and said destination address identifying said path between said Foreign agent and said Access Router (see col. 7 lines 7-49 and col. 3 lines 44-53).

As to claim 5, Leung teaches mobile Node (MN) for use in a Internet Protocol mobility supporting system for supporting the roaming of said Mobile Node (MN) in a Mobile Internet Protocol Network from a Home Network (HN) towards a Visited Network (VN), said Home Network (HN) comprising a Home Agent (HA), said Mobile Node (MN) being connected to said mobile Home Network (HN), CHARACTERIZED IN THAT said Mobile Node (MN) comprises a Foreign Agent Assignment requesting part (FAARP), adapted to request, at detection of entry of said Mobile Node in said Visited Network (VN), a Foreign Agent assigning entity (FAAE) of said Home network (HN) to assign a Foreign Agent (FA) to said Mobile Node (MN) (see col. 6 lines 28-59 and col. 3 lines 44-53).

As to claim 6, Leung teaches foreign Agent assigning entity (FAAE) for use in a Internet Protocol mobility supporting system for supporting the roaming of a Mobile Node (MN) in a Mobile Internet Protocol Network from a home network (HN) towards a Visited Network (VN), said Home Network (HN) comprising a Home Agent (HA), said

Mobile Node (MN) being connected to said mobile Home Network (HN), said Foreign Agent assigning entity (FAAE) comprising the following parts:

a, a Foreign Agent Assignment request reception part (FMRRP), adapted to receive a request for service of a Foreign Agent (FA) of said Mobile Node (MN) (see col. 6 lines 27-59);

b, a Foreign Agent Assigning part (FAAP), coupled with an input to an output of said Foreign Agent Assignment request reception part (FAARRP) and adapted to assign a Foreign Agent to said Mobile Node (MN) at reception of said request for service of a foreign agent (FA) of said Mobile Node (MN) (see col. 6 lines 27-59); and

c, a notification part (NP), coupled with an input to an output of said Foreign Agent Assigning Part (FAAP), and adapted to notify said Foreign Agent (FA) of an assignment of said Foreign Agent (FA) for providing Foreign Agent service to said Mobile Node (MN) (see col. 6 lines 27-59).

As to claim 7, Leung teaches foreign Agent assigning entity (FAAE) according to claim 6, CHARACTERIZED IN THAT said Foreign Agent assigning entity (FAAE) further comprises a Foreign Agent holding part (FAHP) adapted to hold a list comprising at least one Foreign Agent (FA); and that said Foreign Agent Assigning part (FAAP) is coupled to said Foreign Agent Holding Part (FAHP) and is further adapted to select said Foreign Agent (FA) to be assigned from said Foreign Agent Holding Part (FAHP) (see col. 6 lines 48-67).

As to claim 8, Leung teaches foreign Agent assigning entity (FAAE) according to claim 6, CHARACTERIZED IN THAT said Foreign Agent assigning entity (FAAE) is further adapted to assign a Foreign Agent (FA) provided via an Authorisation Authentication Accounting-Server (AAAS) (see col. 5 lines 8-20).

As to claim 9, Leung teaches home agent (HA) for use in a Internet Protocol mobility supporting system for supporting the roaming of said Mobile Node (MN) in a Mobile Internet Protocol Network from a Home Network (HN) towards a Visited Network (VN), said Home Network (HN) comprising said Home Agent (HA), said Mobile Node (MN) being connected to said mobile Home Network (HN), CHARACTERIZED IN THAT said Home Agent (HA) comprises a Foreign Agent Assigning Entity (FAAE) according any of the claims 6 to 8 and that said Home Agent (HA) further comprises a Home Agent Path Establishing Part (HAPEP), coupled with an output to an input of said Foreign Agent Assigning Entity (FAAE) and adapted to establish a connection between said home agent (HA) and said assigned Foreign Agent (FA) (see col. 6 lines 28-59 and col. 3 lines 44-53).

As to claim 10, Leung teaches authentication, Authorization and Accounting Server (AAS) for use in a Internet Protocol mobility supporting system for supporting the roaming of a Mobile Node (MN) in a Mobile Internet Protocol Network from a Home Network (HN) towards a Visited Network (VN), said Home Network (HN) comprising a Home Agent (HA), said Mobile Node (MN) being connected to said Home Network (HN), CHARACTERIZED IN THAT said Home Agent (HA) comprises a Foreign Agent

assigning entity (FAAE) according to any of the claims 6 to 8 (see col. 6 lines 28-59 and col. 3 lines 44-53).

As to claim 11, Leung teaches foreign Agent (FA) for use in a Internet Protocol mobility supporting system for supporting the roaming of a Mobile Node (MN) in a Mobile Internet Protocol Network from a Home Network (HN) towards a Visited Network (VN), said Home Network (HN) comprising a Home Agent (HA) and said Mobile Node (MN) being connected to said Home Network (HN), CHARACTERIZED IN THAT said Foreign Agent (FA) is included in said mobile Internet protocol Network excluding said visited network (VN), and that said Foreign Agent comprises:

a. a Foreign Agent Reception Part (FARP), adapted to receive data from said Home Agent (HA) (see col. 6 lines 27-59); and

b, a Control Part (CP), coupled with an input to an output of said Foreign Agent Reception Part (FARP) and adapted to determine a destination address from said data sent by said home agent (HA) (see col. 6 lines 27-59);

c, Foreign Agent Path Establishing Part (FAPEP), coupled with an input to an output of said Control Part (CP), and adapted to establish a path between said Foreign Agent (FA) and said Mobile Node (MN) based on said destination address (see col. 6 lines 27-59).

As to claim 12, Leung teaches foreign Agent (FA) according to claim 11, CHARACTERIZED IN THAT said Foreign Agent Path Establishing Part (FAPEP) is

adapted to establish a connection between said Foreign Agent (FA) and said Mobile Node (MN) where said destination address is a Internet protocol address assigned to said Mobile Node (MN) (see col. 2 lines 60-67 and col. 4 lines 15-42).

As to claim 13A, Leung teaches foreign Agent (FA) according to claim 11, CHARACTERIZED IN THAT said Foreign Agent connection establishing part (FACEP), is adapted to establish a connection between said Foreign Agent (FA) and an Access Router (AR) at the edge of said Visited Network (VN) where said destination address is a Internet Protocol address assigned to said Access Router (AR) (see col. 5 lines 25-40 and col. 7 lines 1-35).

As to claim 14, Leung teaches access Router for use in a Internet Protocol mobility supporting system for supporting the roaming of a Mobile Node (MN) in a Mobile Internet Protocol Network from a Home Network (HN) towards a Visited Network (VN), said Home Network (HN) comprising a Home Agent (HA), said Access Router (AR) being located at the edge of said visited network, CHARACTERIZED IN THAT, said access router (AR) comprises an Access Router Path Establishing Part (ARPEP) adapted to establish a path between said Access Router (AR) and said Mobile Node (MN) based on forwarding information provided to said Access Router by said Mobile Node (see col. 6 lines 28-59 and col. 3 lines 44-53).

Response to Arguments

3. Applicant's arguments have been fully considered but are not persuasive. Applicant argues in substance that Leung does not disclose a) forwarding a destination address towards home agent; b) assigning FA to mobile node.

In response to A) Leung teaches a system and method including a mobile node roaming from a home network to a visited network and assigning a FA to handle the communications addressed to the mobile node (see abstract). Leung also teaches when the mobile node roams to a remote network, a registration request is sent to the HA where the registration request includes an address of a FA to be recorded in the binding table of the HA to communicate with the mobile node (see col. 2 lines 4-21). Therefore Leung teaches sending the address of the FA "destination address" to said HA as claimed.

In response to B) Leung also teaches that the FA also updates its internal binding table to include the mobile node and also the address of the HA of the mobile node. Therefore Leung teaches "assigning FA to said mobile node".

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to HUSSEIN A. EL CHANTI whose telephone number is (571)272-3999. The examiner can normally be reached on Mon-Fri 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on (571)272-4001. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Hussein Elchanti

June 17, 2008

/Ario Etienne/
Supervisory Patent Examiner, Art Unit 2157